

REMARKS

At the outset, Applicant thanks the Examiner for the thorough review and consideration of the subject application. The Final Office Action of August 31, 2004, has been received and their contents carefully reviewed.

Claims 1, 5, 9, 10, and 19 are hereby amended. Accordingly, claims 1-22 are currently pending. Reexamination and reconsideration of the pending claims is respectfully requested.

In the Office Action, the Examiner objected to the drawings under 37 C.F.R. § 1.83(a) as allegedly failing to show every feature of the invention specified in the claims.

Specifically, the Examiner noted that claimed “first surface of a backlight lamp” and “second surface of a backlight lamp” must be “shown or … canceled from the claims.” Applicants respectfully submit, however, that such features are shown for at least the following reasons.

It is undisputed that the reflection plate, the backlight lamp, and the diffusion plate, all features recited in claim 19, are shown in the drawings and described in the specification (see, e.g., Figure 6 and paragraph [0063] for an illustrative discussion of such features). Because the drawings and specification show and describe such structures, in addition to their physical arrangements, the drawings and specification must also, logically, show and describe the claimed first and second surfaces of the backlight lamp. Moreover, Applicant respectfully submits that 37 CFR § 1.83(a) does not require every feature specified in the claims be expressly identified with a reference numeral. Rather, 37 CFR § 1.83(a) merely requires that the drawings “show every feature of the invention specified in the claims.” In

view of remarks provided above Applicant respectfully submits that one of ordinary skill in the art, having read claim 19 in its entirety as well as the drawings and the relevant portions of the specification, would readily appreciate the drawings show every feature noted by the Examiner (i.e., the first and second surfaces of the backlight unit).

In the Office Action, the Examiner rejected claims 2, 6, and 20 under 35 U.S.C. § 112, first paragraph, as allegedly failing to “reasonably provide enablement for ‘each of the lamps/chips has a luminescent area over 100 degrees’.” This rejection is respectfully traversed and reconsideration is requested.

An application need not explain every detail since the Applicant is speaking to those skilled in the art. *DeGeorge v. Bernier*, 768 F.2d 1318, 226 USPQ 758 (Fed. Cir. 1985). Not every last detail is to be described, else patent specifications would turn into production specifications, which they were never intended to be. *In re Gay*, 309 F.2d 769, 774, 50 CCPA 725, 733, 135 USPQ 311, 316 (CCPA 1962). Accordingly, the enablement requirement of 35 U.S.C. § 112, first paragraph, requires that the specification adequately discloses to one skilled in the art how to make and/or use the claimed invention without undue experimentation. *Process Control Corp. v. Hydrexclaim Corp.* , 190 F.3d 1350, 52 USPQ2d 1029 (Fed. Cir. 1999). Whether undue experimentation is needed is a conclusion reached by weighing many factual considerations (i.e., quantity of experimentation necessary, amount of direction or guidance presented, presence or absence of working examples, nature of the invention, state of the prior art, relative skill of those in the art, predictability or unpredictability of the art, and breadth of the claims). *In re Wands*, 858 F.2d 731, 8 USPQ2d 1400 (Fed. Cir. 1988). As noted in M.P.E.P. § 2164.06, the quantity of experimentation needed to be performed by one skilled in the art is only one factor involved in determining

whether “undue experimentation” is required. Moreover, the test is not merely quantitative since a considerable amount of experimentation is permissible if it is merely routine.

Nevertheless, in rejecting claims 2, 6, and 20 the Examiner asserts that the specification is not enabling because “[o]ne in ordinary skill in the art would have recognized that there are many variables to control or produce a desired output (solid angle) of the LED, including, shape of the reflector support, refracting cover … etc.” Applicant respectfully submits, however, that the mere existence of “many variables” which may be used to control the desired output of the LED does not, and cannot, be used to establish an undue quantity of experimentation.

The Examiner cites Meggs et al. (U.S. Patent No. 4,521,835) as containing a specification that “clearly shows enablement” for LEDs “capable of covering over 100 degrees of luminescent area.” Applicant respectfully submits, however, that while Meggs et al. may enable one to produce LEDs “capable of covering over 100 degrees of luminescent area,” Meggs et al. fails to provide any evidence that one skilled in the art could not obtain a luminescent area of over 100°, as described in the present specification, through undue experimentation. Indeed, Applicants respectfully submit that Meggs et al. is strong evidence that one of ordinary skill in the art, at the time the present invention was made, would readily appreciate how to produce LEDs “capable of covering over 100 degrees of luminescent area.” Applicant’s acknowledgment of Meggs et al. in no way constitutes an admission that the LED of the present invention is the LED of Meggs et al. Rather, Meggs et al. has merely been cited as an illustrative example that LEDs with a luminescent area over 100° were, known by those skilled in the art at the time the present invention was made.

In the “Response to Arguments” section of the present Office Action, the Examiner further cites Wilson et al. (U.S. Patent No. 6,056,420) as containing a table that shows “different characteristics of … LEDs that … includes difference in an emission angle.” Specifically, the Examiner cites Table 1 of Wilson et al. as allegedly disclosing “commonly manufactured LEDs has an emission … [angle] of 20-45 degrees which is substantially different … [than] applicants’ LED(s) which has … [a] luminescent area over 100 degrees.” Applicant respectfully submits, however, that the alleged teaching of Wilson et al. is irrelevant with respect to the present rejection as it cannot be reasonably presumed that all LEDs have emission angles of 20-45° simply because Wilson et al. teaches an LED having such an emission angle. Moreover, and as clearly shown in Meggs et al., one of ordinary skill in the art would readily appreciate that LEDs having luminescent areas of over 100° exist and, therefore, can be produced and used without undue experimentation.

For at least the reasons set forth above, Applicant respectfully requests withdrawal of the present rejection under 35 U.S.C. § 112, first paragraph.

In the Office Action, the Examiner rejected claims 1, 5 11-14, and 19 under 35 U.S.C. § 102(e) as being anticipated by Mochizuki (U.S. Patent No. 6,386,720). This rejection is respectfully traversed and reconsideration is requested.

As set forth in M.P.E.P. § 2131, a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described in a single reference. That is, the identical invention must be shown in as complete detail as contained in the claim. Stated another way, the elements shown in the reference must be arranged as required by the claim.

Applicant respectfully submits that, Mochizuki fails to anticipate claim 1. For example, Applicant respectfully submits that Mochizuki fails to teach, either expressly or inherently, “wherein a plurality of lamps are arranged such that LED chips realizing R, G, and B colors are built in the respective lamps and wherein the planar surface of the diffusion plate is uniformly and directly exposed to light emitted by the plurality of lamps,” as currently recited in claim 1. It is respectfully submitted that Mochizuki fails to anticipate claims 5 and 19 as claims 5 and 19 recite features similar to those found in claim 1. Accordingly, Applicant respectfully submits that Mochizuki also fails to anticipate claims 12-14, which variously depend from claims 1 and 5. For at least these reasons, Applicant respectfully requests withdrawal of the present rejection under 35 U.S.C. § 102(e).

In the Office Action, the Examiner rejected claims 3, 4, 7, 8, 21, and 22 under 35 U.S.C. § 103(a) as being unpatentable over Mochizuki. This rejection is respectfully traversed and reconsideration is requested.

Claims 3, 4, 7, 8, 21, and 22 variously depend from independent claims 1, 5, and 19. The Examiner asserts that the features recited in claims 3, 4, 7, 8, 21, and 22 are obvious in light of Mochizuki. Without reaching the merits of this assertion, Applicants respectfully submit that claims 3, 4, 7, 8, 21, and 22 are unobvious by virtue of their various dependence from claims 1, 5, and 19. For at least this reason, Applicants respectfully request withdrawal of the present rejection under 35 U.S.C. § 103(a).

In the Office Action, the Examiner rejected claims 2, 6, and 20 under 35 U.S.C. § 103(a) as being unpatentable over Mochizuki in view of Meggs et al. (U.S. Patent No. 4,521,835). This rejection is respectfully traversed and reconsideration is requested.

Claims 2, 6, and 20 variously depend from independent claims 1, 5, and 19. Meggs et al. is asserted by the Examiner as disclosing features recited by dependent claims 2, 6, and 20. Without reaching the merits of this assertion, Applicant respectfully submits that Meggs et al. fails to cure the above-cited deficiency of Mochizuki as applied to claims 1, 5, and 19 above. Therefore, Applicant submits that the combination of Mochizuki in view of Meggs et al. fails to render claims 2, 6, and 20 obvious under 35 U.S.C. § 103(a). For at least this reason, Applicants respectfully request withdrawal of the present rejection under 35 U.S.C. § 103(a).

In the Office Action, the Examiner rejected claims 1, 5, and 11-14 under 35 U.S.C. § 103(a) as being unpatentable over Tokunaga (U.S. Patent No. 5,375,043) in view of the related art shown in Figures 1 and 2. This rejection is respectfully traversed and reconsideration is requested.

According to M.P.E.P. § 2143.03, every element must be taught or suggested by the applied references to establish a *prima facie* case of obviousness.

Applicant respectfully submits that the combination of Tokunaga in view of the related art shown in Figures 1 and 2 fails to render claim 1 obvious. For example, Applicant respectfully submits that neither Tokunaga nor the related art shown in Figures 1 and 2, singly or in combination, teaches or suggests “wherein a plurality of lamps are arranged such that LED chips realizing R, G, and B colors are built in the respective lamps and wherein the planar surface of the diffusion plate is uniformly and directly exposed to light emitted by the plurality of lamps,” as currently recited in claim 1. It is respectfully submitted that the combination of Tokunaga in view of the related art shown in Figures 1 and 2 fails to render claim 5 obvious as claim 5 recites features similar to those found in claim 1. Accordingly,

Applicant respectfully submits that Tokunaga in view of the related art shown in Figures 1 and 2 also fails to render claims 12-14, which variously depend from claims 1 and 5, obvious. For at least these reasons, Applicant respectfully requests withdrawal of the present rejection under 35 U.S.C. § 103(a).

In the Office Action, the Examiner rejected claims 9 and 10 under 35 U.S.C. § 103(a) as being unpatentable over Stinson. This rejection is respectfully traversed and reconsideration is requested.

Applicant respectfully submits that Stinson fails to render claim 9 obvious. For example, Applicant respectfully submits that Stinson fails to teach or suggest “wherein the planar surface of the diffusion plate is uniformly and directly exposed to light emitted by the plurality of lamps,” as currently recited in claim 9. It is respectfully submitted that Stinson fails to render claim 10 obvious as claim 10 recites features similar to those found in claim 9. For at least these reasons, Applicant respectfully requests withdrawal of the present rejection under 35 U.S.C. § 103(a).

In the Office Action, the Examiner rejected claims 15-18 under 35 U.S.C. § 103(a) as being unpatentable over Stinson in view of either Mochizuki or Tokunaga. This rejection is respectfully traversed and reconsideration is requested.

Claims 15-18 variously include all of the elements of claims 9 and 10, respectively, as discussed above, and Stinson fails to teach or suggest at least the features of independent claims 9 and 10 as recited above. Similarly, both Mochizuki and Tokunaga fail to cure this deficiency of Stinson. Therefore, Applicant submits that the combination of Stinson in view of either Mochizuki or Tokunaga fails to render claims 15-18 obvious under 35 U.S.C. §

Application No.: 09/893,558
Amendment dated November 24, 2004
Reply to final Office Action dated August 31, 2004

Docket No.: 8733.461.00-US

103(a). For at least this reason, Applicants respectfully request withdrawal of the present rejection under 35 U.S.C. § 103(a).

Applicant believes the foregoing amendments place the application in condition for allowance and early, favorable action is respectfully solicited.

If for any reason the Examiner finds the application other than in condition for allowance, the Examiner is requested to call the undersigned attorney at (202) 496-7500 to discuss the steps necessary for placing the application in condition for allowance. All correspondence should continue to be sent to the below-listed address.

If these papers are not considered timely filed by the Patent and Trademark Office, then a petition is hereby made under 37 C.F.R. §1.136, and any additional fees required under 37 C.F.R. §1.136 for any necessary extension of time, or any other fees required to complete the filing of this response, may be charged to Deposit Account No. 50-0911. Please credit any overpayment to deposit Account No. 50-0911. A duplicate copy of this sheet is enclosed.

Dated: November 24, 2004

Respectfully submitted,

By Valerie P. Hayes *Reg. No.
for Kurt M. Eaton*
Registration No.: 51,640
MCKENNA LONG & ALDRIDGE LLP
1900 K Street, N.W.
Washington, DC 20006
(202) 496-7500
Attorney for Applicant